

Vol. IV

TRANSCRIPT OF RECORD

(Pages 1587 to 2096)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY
AND SUSQUEHANNA TRANSMISSION COMPANY
OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION,
PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF
APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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[11767]

GEORGE H. DAVIS

* * *
REDIRECT EXAMINATION (Continued)

By MR. GOLDBECK:

[11769] Q. At transcript page 10538 and 10539, Mr. Myse asked you about the effect of an option in the Penn Water-Pennsylvania Power and Light Company agreement which you had discussed at page 44 of Exhibit 47. Was that option in effect in 1944? A. No.

Q. Was it in effect in 1945? A. No.

Q. Does that mean that the option had no bearing on the operations of the agreement between Holtwood and Pennsylvania Power and Light Company in 1944 and 1945? A. Yes.

[11773] Q. Referring to the question and answer beginning at transcript 10813, line 22 and ending at transcript 10814, line 4, are we to understand that you have ignored the costs of Safe Harbor incurred for services supplied to the railroad in Maryland? A. No, you are not.

Q. Did you ignore Safe Harbor's costs involved in rendering service to the railroad in Maryland? A. No.

Q. Will you please explain why you say no? A. Because all of Safe Harbor's costs are reflected in the payments made by Consolidated and Holtwood to Safe Harbor under Items E, F and G.

Thus, since Holtwood's payment of one-third of those costs is included in the total costs with which I was dealing in Exhibit 64, I have not ignored any costs which may be involved in the rendering of service to the railroad in Maryland for the account of Baltimore.

In other words, one-third of Safe Harbor's total costs [11774] are included in Holtwood's costs for whatever service those costs may have been incurred, and I have treated that one-third as Holtwood's costs, which they are.

Q. At transcript pages 10814 and 10815 you were questioned concerning the assignment of facilities which are directly related to the service of only one customer.

Have you assigned such facilities directly to the particular customer in all cases? A. No, not in all cases.

Q. Now, will you explain why you haven't done that in all cases? A. The bill for Safe Harbor power rendered to Holtwood was not analyzed for the purpose of attempting to segregate costs of single-phase from the costs of three-phase generation at Safe Harbor, but was all assigned to the pool.

This appeared to be warranted because of the flexibility in operation of the single-phase and three-phase generators provided by the frequency changer and the resulting ability to transfer power from the single-phase to the three-phase buses, or in the reverse direction.

From the fact, however, that single-phase equipment represents some investment in excess of equivalent three-phase equipment, and that in actual practice only a small proportion of the single-phase generation is converted for use in the three-phase system, it probably could be said that it is [11775] more accurate to segregate this excess cost and assign it proportionately to the railroad service in Pennsylvania and in Maryland on the same basis as the allocation of the Conestoga Substation. If this method were to be followed, it would reduce the pool costs by \$46,900, and increase costs allocated to Baltimore by 39 per cent of this amount or \$18,291, and increase costs assigned to the railroad for service in Pennsylvania by 61 per cent, or \$28,609.

[11776] Q. Now, at transcript pages 11106 and 11107, you were asked about the use of the 25-cycle equipment at Holtwood for serving customers other than Baltimore Company.

Do you wish to modify any of your answers on those pages? A. Yes, my answer on page 11106, line 11 requires some modification.

Q. Will you please state what modification you think is required? A. The energy going through the frequency changer from the 25-cycle to the 60-cycle bus on the peak day was as much as 14,000 kilowatts during certain hours, which was considerably larger than I had indicated.

Furthermore, I find that during the peak day of 1944 as much as 6,000 kilowatts during one hour were delivered to Pennsylvania Power and Light Company at Lancaster. These data I find in Exhibit 42, page 20, column 40 and 42.

Page 20 of the same exhibit, column 40 through 43 also shows that during the hour ending at 6 p.m., December 11, 1944, 4,000 kilowatt hours were delivered to Pennsylvania Power and Light Company, 54,000 kilowatt hours were delivered to Highlandtown and 12,000 kilowatt hours delivered to the frequency changer for transfer to the 60-cycle bus at Holtwood.

Q. The hour you refer to was the peak hour on the [11777] interconnected system? A. That 6 p.m., December 11, was the hour of system peak for 1944.

Q. At transcript 11106, line 15, you stated that you could hardly find a significant amount of power from the 25-cycle generators at Holtwood getting to Coatesville.

Have you had an opportunity to review any data for the purpose of verifying your answer? A. Yes, I have.

Q. What have you reviewed? A. The data in Exhibit Number 42.

Q. And as a result of that review, what have you found? A. I find on page 20 of Exhibit 42 in column 35 during the hour ending 6 p.m., December 11, 1944, that 55,000 kilowatts were sent out from the 13 kv 60-cycle bus at Holtwood to Holtwood's customers in Pennsylvania.

I also find on the same page, line 23, for the hour ending 6 p.m. of the same day that 12,000 of the 55,000 kilo-

watt hours were supplied from the 25-cycle generators at Holtwood.

In other words, I find that the use of 25-cycle generation during the hour of system peak in Area 6 for supply to Holtwood's Pennsylvania customers was a significant amount.

[11779] Q. At transcript pages 11107 and 11109 you were asked about the joint use of eight out of ten generating units at Holtwood for service to all customers. Is that right? A. Yes.

Q. Through these questions the ratios that you used in allocating total pool costs were applied to Holtwood hydro plant alone and at page 11392 it was computed that 16 per cent of the costs of this plant had been allocated to Baltimore, whereas 80 per cent of the generators were 25-cycle and with two exceptions, their total output was delivered to Baltimore. Does that present a true picture of the situation? A. No, it does not.

Q. Why not? A. The ratio on which costs of a group of properties are allocated does not necessarily apply separately to each individual item in the group. Pool costs were allocated as a group including Holtwood hydro and steam, one-third of [11780] Safe Harbor and some transmission facilities, and if one customer received only 25-cycle energy and another received only 60-cycle energy, no injustice was done by allocating to each the average cost of 25 and 60-cycle energy. There are several reasons why the allocation results in no injustice.

In the first place, there is no significant difference between the cost of 25-cycle generation and the cost of 60-cycle generation at Holtwood.

In the second place, the largest part of the output of the 25-cycle generators at Holtwood has to be delivered to Baltimore whether it can be used there or not, because outside of the exceptions previously noted, it is the only outlet for the 25-cycle output from Holtwood.

Furthermore, Exhibit 42 shows that an amount equivalent to about 35 per cent of the 25-cycle energy delivered at Highlandtown is simultaneously transmitted back to Safe Harbor over the 220 Kv lines for use in its 60-cycle system in Pennsylvania. In view of this situation, it is clear that the costs of 25-cycle generation at Holtwood and perhaps, some part of the cost of the Highlandtown transmission should be allocated to the pool.

Q. At page 11144 you were questioned as to the allocation of general plant on the basis of the average of the classified plant and it was stated in criticism of that method that some items in general plant were used entirely [11781] in connection with the Highlandtown line.

Do you consider that your method needs correcting for that reason? A. No, I do not.

Q. Will you state why not? A. General plant is made up of a number of items which are not considered susceptible of direct classification with any of the standard property groups. It is impractical to allocate general plant item by item, and while any item related—if there was such an item—entirely to the Highlandtown line would not be allocated 100 per cent to Baltimore by my method, which is the method commonly used, there would be allocated to Baltimore a portion of some other items only remotely related to it so that the over-all result is considered as accurate as it is practicable to obtain.

TRIAL EXAMINER: When you say it is a method commonly used, do you have in mind any particular case?

THE WITNESS: In practically every case that I have ever seen, intangible and general plant is spread over the classified items on the ratio of the totals of each classified group.

TRIAL EXAMINER: Do you know of any reported case where that has been done?

THE WITNESS: I don't have one in mind right now. I think it is a very common method of allocating property that [11782] is not susceptible of classification into the standard groups of production, transmission, distribution.

TRIAL EXAMINER: Do you have any reported case available in your notes?

THE WITNESS: I have no recollection of one at this time. I think I could easily find one.

By MR. GOLDBERG:

Q. At pages 11259 to 11264 you were asked concerning the demand you used for the railroad load which you substituted for the actual demand at the hour of the interconnected system peak. Why did you use the billing demand instead of the actual demand at the hour of system peak? A. The railroad load creates such rapidly fluctuating demands that the load at any selected hour may greatly misrepresent the capacity requirements for that load.

This fact is fully recognized by the railroads and the power suppliers and demand charges are based on the average of several maximum daily demands during the month instead of the single maximum, such averages being considered more accurately representative of the capacity required.

Such an average also serves as a more accurate measure of the cost of service to such a load than would the actual load at one particular hour.

The demand charge from the Pennsylvania Railroad Company is based on the average of the three highest daily maximum [11783] demands during the month, and this billing demand for the month of December was used for the purpose of determining the capacity required for this load.

Q. At transcript 11265 you were asked about the actual station use and loss in connection with dependable capacity under adverse flow conditions, which was reported as 23,000 kilowatts at the time of system peak.

Will you please explain why you used that figure?

A. Because it was the amount actually reported in Form 12 for "Baltimore System" at the peak hour when 300,000 kilowatts was generated.

Q. Should any revision be made in that 23,000 kilowatts, in your opinion? A. Yes, I believe so.

Q. What revision should be made? A. Since in my study, 251,000 kw is used as the estimated generation under adverse conditions, I think the 23,000 should be proportionately reduced to reflect the loss associated with the 251,500 kw.

• • •

[11788] Q. Mr. Davis, isn't it a fact that special facilities represent a part of the costs of delivering kilowatt hours?

A. Certainly. Ordinarily all those costs of the special facilities would be included with the other costs and computed on the basis of kilowatts and kilowatt hours.

• • •

[11789] Q. In other words, if I understand your answer, Mr. Davis, setting them up separately is a matter of form rather than of substance. Isn't that so? A. Yes.

MR. SPARKS: I am sorry. I don't understand that now. Setting what up separately?

MR. GOLDBERG: Costs of special facilities.

• • •

[11790] By MR. GOLDBERG:

Q. At Transcript pages 11177 and 11178 Mr. Myse asked you whether Table 4 included all of the costs of Holtwood Company and you testified that Counsel's statement was right so far as it went, isn't that right? A. Yes.

Q. When you testified at Line 4 of Transcript 11178 that "You—" —meaning counsel for Respondent—"are right [11791] as far as you go," what did you have in mind?

A. The costs to which he referred as not being included in Table 4 were costs of interchange energy purchased from

Pennsylvania customers, which costs were entirely offset by the sale of interchange energy to the same customers, resulting in a net revenue which I took into account.

Q. In other words, it hasn't been left out in the sense that it has been ignored. Is that right? A. No, it has not.

[11885] RECROSS EXAMINATION (Continued)

By MR. MYSE:

[11896] Q. Now, will you look at E, F and G for a moment, Article VII, page 10? A. I don't have a copy of that contract with me.

Q. We will furnish you with one.

That article covers generally the furnishing of transmission lines by Holtwood to Baltimore for the transmission of energy sold by Safe Harbor to Baltimore. Isn't that right? A. That is right.

[11897] Q. And included in that article on page 10 is a provision that if for any reason Holtwood fails to transmit or cause to be transmitted to Baltimore any of the energy sold by Safe Harbor to Baltimore Co., Holtwood will forthwith purchase all such energy from Safe Harbor at Safe Harbor and pay therefor at the rates payable by Baltimore Company under Article V of E, F, and G. Isn't that right?

A. That is right.

Q. Now, that means, does it not, that if Penn Water or Holtwood, as specified in that contract, fails to transmit whatever energy may be sold by Safe Harbor to Baltimore, it is required to pay for all that energy itself, isn't it? A. That is right.

Q. And receive it. Isn't that right? A. That is right.

Q. Now, you don't find anything like that in any of these Pennsylvania contracts, do you? A. No.

Q. Now, what effect, if any, did you give to these various provisions in Articles IV, V, VI, VII, VIII and IX

of those Items "H" and "I", and Article VII of E, F and G in your Exhibit 64?

[11898] MR. GOLDBERG: I don't think that there is anything in the redirect examination of the witness Davis, Mr. Examiner, or during the cross examination of the witness Davis by Mr. Sturtevant, which makes that a proper question, and I object to it on that ground.

TRIAL EXAMINER: The objection is overruled.

THE WITNESS: These particular articles in H and I are the basis for the statement I made on cross examination that in economic effect the entire output of Holtwood is sold for the account of Baltimore, and they are the basis for my considering that the interchange energy was a part of the residual to which Baltimore was entitled and was sold for its account.

The basis for my including that revenue in the revenue received from Baltimore—

By MR. MYSE:

Q. Well, I don't want to dispute with you, Mr. Davis, but as I understood your testimony at that time you were limiting the basis for those conclusions to Article VIII of H and I.

Do you now include Articles IV, V, VI, VII and IX, as well as Article VIII? A. I don't want to pin it to those. I think I stated I included the entire contract without picking out parts that specifically applied.

[11899] Q. Well, did you consider Article VII of E, F and G in any way in coming to the conclusions you did in Exhibit 64? A. Only except that the costs of transmission are included in Holtwood's costs.

Q. Well, if tomorrow Holtwood Company were to fail to transmit the energy sold by Safe Harbor to Baltimore, what effect would that have on your Exhibit 64? A. I hadn't considered that.

Q. Well, doesn't the contract say in the event of such a failure Holtwood—that is, Penn Water—is required to purchase whatever energy was theretofore sold by Safe Harbor Company at Safe Harbor to Baltimore, and pay Safe Harbor for that energy at the amounts that Baltimore Company theretofore paid Safe Harbor under Article V? A. It says that in the amounts payable under Article V is an amount that will yield Safe Harbor a seven per cent [11901] return in addition to all operating expenses.

Q. And in considering Article V in connection with what it says under Article II, it would mean that Baltimore Company's proportion of the payments is two-thirds of those expenses. Isn't that right? A. That is right.

Q. So that in the event of failure to transmit the energy sold by Safe Harbor to Baltimore, Penn Water or Holtwood's expenses would be increased by two-thirds of the total expenses of Safe Harbor. Isn't that right? A. That is a point I hadn't considered before.

Q. Well, isn't it right? A. If there were no transmission of energy, that is if none of the energy sold by Safe Harbor to Baltimore were transmitted by Holtwood, it would seem that might be a possible effect.

Q. Well, it would also be true if only some of the energy sold by Safe Harbor to Baltimore were not transmitted by Penn Water to Baltimore. Isn't that right? A. There might be a proportionate reduction in the payment.

Q. So that if there were a failure tomorrow by Penn Water to transmit whatever energy is sold by Safe Harbor to Baltimore under E, F and G, it would have a material effect on your Exhibit 64, would it not? [11902] A. It might be true.

Q. Well, it not only might be true, but it would have a material effect. Isn't that right? A. Well, for the period during which that lasted, it would be probably the same conditions as if the line hadn't been built.

Q. And if that were an indefinite period, it would continue to have that effect on the conclusions you reached in Exhibit 64. Isn't that right? A. Well, that would be the same as if any other radical change in equipment or arrangements should happen, and became permanent. I did not attempt to foresee those things in Exhibit 64.

[11905] Q. You pointed out that the Pennsylvania contracts are on an automatic, or as you put it, an automatically renewable basis. Is that right? A. Yes, that is right.

[11906] Q. And that means, as I understand it, that unless they are terminated under the terms of the contracts by either of the parties thereto, they would extend indefinitely into the future. Is that right? A. That is right.

Q. And that means that if they were so extended automatically and indefinitely into the future, Penn Water would continue to render service under those contracts, and the very terms of the contracts, until long after the Baltimore contract—and that is "H" and "I"—had terminated by its own terms. Isn't that right?

[11907] THE WITNESS: If the Pennsylvania contracts are continued indefinitely to the end of time, and the Baltimore contract is not renewed, your statement would be correct.

[11926] Q. Did you make any investigation to determine how many hours out of the year 1944 or any other year, there would have been more 25 cycle load converted at Holtwood if there had been greater capacity in the frequency changers at Holtwood? A. I made a partial investigation, not of every hour in the year, but of a selected number of hours in the year when Holtwood would be short of 69 cycle capacity to supply its Pennsylvania customers, but had an excess of 25 cycle capacity, and the 25 cycle capacity

was delivered to Baltimore, and Baltimore returned 60 cycle energy at the same time. The capacity in the frequency changers was limited at Holtwood, but they had more capacity in the frequency changers [11927] down in the Baltimore system.

Q. Did you determine how many hours in the year 1944 or any other year that that condition existed that you just referred to? A. I only studied the 20 days that we obtained hourly readings on for 1944.

Q. Those 20 days aren't typical in your opinion, are they? A. Well, there are some typical days there. That is not a Gallup Poll cross-section of the year, I will admit.

Q. Well, which days did you consider were typical in making that last answer?

MR. GOLDBERG: You mean typical in connection with the study you are now pursuing?

MR. MYSE: That is right.

THE WITNESS: I would say significant days, such as peak days.

By MR. MYSE:

Q. Are you now saying that there are no typical days in Exhibit 42 in connection with the matter we are now pursuing? A. No, I did not say anything like that.

Q. Well, then will you point out to me which ones you so consider as typical? A. Well, there are typical days of the different [11928] periods. You can't have a typical day for the whole year. There are typical days of low flow periods, typical days of high flow periods, typical days of maximum load period.

Q. Well, then, as I understand you, there are no typical days in Exhibit 42 for the year? A. I do not think there is such a thing.

* * *

[11931] Q. Now, I am interested in having you go back to Exhibit 42 and point out just what days you considered

low-flow when there was 25 cycle generation converted to 60 cycle at Holtwood. Can you do that quickly for me? I think you would look at column 42 in each case, would you not? A. From 25 to 60, is that right?

Q. Now, which of the days in Exhibit 42 did you consider low-flow days when there were substantial amounts of energy shown in column 42 of Exhibit 42? A. I will correct my statement there. I was looking to the column where it goes the other way.

Q. Which column were you looking at? [11932]

A. I was looking at column 36.

Q. So that means, does it, that so far as Exhibit 42 is concerned, it was the low-flow days when you would expect to find and did find the major portions of the sixty cycle energy at Holtwood being converted to 25 cycle, is not that right? A. Yes.

Q. And it was the high-flow days, so far as Exhibit 42 is concerned, that you did find that substantial portions of 25 cycle energy at Holtwood was converted to 60 cycle energy, is not that right? A. Yes.

Q. Now, if you will refer a moment to page 11776 of the transcript of February 27, you there referred to the same subject matter, did you not? A. Yes.

Q. Except that in that case you were referring to the specific hour and day of December 11, 1944.

Now, that particular day was a high-flow day, was it not? I think if you will look at Exhibit 43 you will find that it is 37,400 Cfs. A. Yes, that is called a high flow day.

Q. Now, if it had been an adverse flow day—that is, a low-river flow day, the conditions with respect to conversion would have been quite different, is that right? [11933] A. That should be true.

Q. Well, it would be true, is not that right? A. I expect it would.

[11936] Q. Now, at various times in your testimony you have [11937] testified about 25 cycle energy being trans-

mitted from Holtwood to Highlandtown in an amount more than the Baltimore load requires, and specifically at page 11456 you reiterated that statement, line 5, did you not?

A. Yes.

Q. Now, did you make any study to determine during what hours of any year, including the year 1944, Baltimore's 25 cycle requirements are less than the 25 cycle delivery at Highlandtown? A. No, I did not study the Baltimore load—25 cycle load. It is only a question of frequency changer capacity at one end or the other.

Q. Well, in order to make your answer at page 11456—in order to make it an answer that means something, you would have to know what proportion of the time Baltimore's 25 cycle requirements are less than the amount of 25 cycle delivery at Highlandtown, would you not? A. No, there is considerable 25-cycle generating capacity in Baltimore also which could—and there is converting equipment in Baltimore. I made no special study of the Baltimore load, either 25 cycle or 60 cycle customers' requirements.

Q. Isn't it a fact that at the time you gave that testimony on February 10, 1947, you did not know whether or not there was any 25 cycle generating capacity at Baltimore? [11938] A. I don't recall that I did not.

Q. Well, did you know at the time you gave your testimony on February 10, 1947, that there was some generating capacity of 25 cycle capacity at Baltimore? A. I do not know whether I recalled it at that particular time. I had known, and I do now.

Q. Well, at page 11459 you said, at lines 13 to 16, you did not know whether there was any actual generating capacity at 25 cycles at Baltimore. Are you changing that testimony now? A. I didn't recall it—at that time.

Q. Well, is there, or is there not? A. There is.

[11939] Q. Well, if there are some plans to remove the 25 cycle generating capacity at Baltimore, that would les-

sen the likelihood of displacement as you use the term at page 11456. Is not that right? A. Well, Baltimore generates less—could generate less 25 cycle energy and generate more 60 cycle and let its 25 cycle load be served through Highlandtown, and supply the 60 cycle energy to Holtwood, because Holtwood needed 60 cycle and had an excess of 25 cycle energy. That was the condition I referred to and that could exist even after some 25 cycle generating equipment might have been removed.

Q. Well, the fact is that if you remove the 25 cycle generating capacity at Baltimore, it would—to that extent—lessen the probabilities that you spoke about at page 11456, beginning line 5, is not that right? A. I would think it would increase the probability.

Q. You mean if they took out the 25 cycle generating capacity at Baltimore that thereby the amount of Baltimore requirements of 25 cycle energy would be less? A. No, it would not affect the requirements for 25 cycle energy.

Q. The requirement from some other system would be thereby [11940] increased. Is not that correct? A. Yes, that is true.

Q. And the only place it can get it is from Holtwood? Is that not right? A. They have to take what there is at Holtwood, whether they need it or not.

Q. Well, now, the fact is you just do not know whether Baltimore needs the 25 cycle capacity from Holtwood or not, do you? A. I know they have to take it whether they need it or not.

Q. But you do not know whether they need it? A. I have made no study of the 25 cycle load in Baltimore.

Q. So that means you do not know whether they need it, is not that right? A. Yes, sir.

• • •

[11941] Q. Now, at the bottom of page 11456 and the top of [11942] page 11457, you were talking about Holtwood's

one-third of Safe Harbor, and Baltimore's share of Safe Harbor power. Were you there referring to what you called the two-thirds entitlement of Baltimore? A. That is right, I believe.

Q. Well, in giving your testimony at the bottom of page 11456 and the top of 11457, were you referring to Baltimore Company's two-thirds share on an hourly, a daily, or an annual basis? A. Well, this question is not based on an annual basis. It is based on frequent times.

Q. Well, I am asking you what you had in mind. A. I was answering the question, and I think I had in mind that this was at times during the year and not an annual amount.

Q. But my question to you now is: When you were referring to Baltimore's share which you said was a two-thirds share, were you referring to it on an hourly, daily or an annual basis? A. I did not think specifically about hourly or daily but just at certain periods of time within the year.

Q. Well, will you think about it now and tell me whether you are referring to Baltimore's share on an hourly, daily or annual basis?

* * *

[11943] THE WITNESS: Not on an annual basis. It might have been on an hourly or a daily basis. More likely an hourly basis would fit.

By MR. MYSE:

Q. Now, back on page 11456, line 21, you say, "That is true," to the statement by Mr. Sturtevant that some of the 25 cycle output at Holtwood is transmitted to Baltimore in exchange for part of Baltimore's two-thirds share of Safe Harbor output, and used for interchange purposes with Pennsylvania customers, is that right?

* * *

THE WITNESS: I think that happens at times.

By Mr. Myse:

Q. Now, that energy that is used for interchange purposes under the assumptions you made in Exhibit 64 is a use for the benefit of Baltimore, is not that correct? A. Well, you cannot divide that energy that comes up [11944] as to its use for interchange, or firm power. That is, I could not at the time I was preparing Exhibit No. 64 until later on when it was divided and it was shown that a small portion was used for interchange.

Q. I did not ask whether you could divide it. I asked you whether or not that interchange we are speaking about, which comes up over the 220 lines, is—at least that portion of it undivided, if you will—constitutes a use of those lines for the benefit of Baltimore? A. I would say that small portion that was actually used for interchange was furnishing an outlet for Baltimore's energy.

Q. You say it is a small portion. Have you ever made any investigation to determine what portion is interchange use and what is firm power? A. No, Mr. Spaulding did that for me.

[11946] Q. Is it a document entitled, "Allocation of Assumed Energy Entitlements for the Year 1944"? Is that what you had reference to, Mr. Davis? A. Well, that was the title placed upon the later tabulations after they were requested, but they bear the same figures that are on Exhibit 143 for the two months there shown, and the title on that is "Energy Purchased by Baltimore from Holtwood Company, from Safe Harbor Company and Energy Purchased by Baltimore Company from Holtwood Company".

Q. Well, you recollect enough about Exhibit 143, now, do you not, to know that that exhibit was not furnished to you by Mr. Spaulding, is not that right? A. It was not furnished to me at all except from the filed exhibit.

Q. Filed by whom? A. I believe that was introduced—I do not remember who introduced that.

MR. GOLDBERG: Goldberg marked it.

MR. SPARKS: Mr. Goldberg introduced it.

By MR. MYSE:

Q. Now, will you look at the document entitled, "Assumed Energy Entitlement, 1944", which you referred to, and [11947] point out to me whether there is anything on that document which divides the energy displaced, as you called it, at Baltimore which comes up the 220 lines between energy used for the purposes of interchange and energy used in connection with firm power requirements, and I haven't referred to Exhibit 143, Mr. Davis? A. These are the same figures that are on your so-called "Assumed Tabulation".

Q. I am asking you to refer to this document (indicating). Will you do so, please, and point out to me anything in the nature that I asked for.

THE WITNESS: This document does not divide the back-feed into the amount used for firm power and the amount used for interchange.

[11950] Q. Now, at page 11457, beginning line 16, you say, as I understand it, at times the 25 cycle energy generated at Holtwood is all used in Baltimore as such, is that right? A. That is what the statement says.

Q. Well, I didn't quote the statement, but I want to know if that means that at times the 25 cycle energy generated at Holtwood is all used in Baltimore as such? A. Well, I meant the amount transmitted to Baltimore. I did not mean the exceptions of what might have gone through the frequency changer or up to Lancaster; those exceptions of course should be a part of that answer.

[11956] Q. Now, will you turn to page 11464, line 5, please. Lines, 5 through 7, where your answer appears. You there used the term or the phrase that Safe Harbor energy is diverted to Holtwood Company. What did you there mean in connection with the use of that phrase? A. It is delivered to Holtwood instead of being delivered physically to Baltimore.

Q. Well, the fact is that all of Safe Harbor energy is delivered physically to Holtwood; isn't that right, and when I say Holtwood, I mean Pennsylvania Water and Power Company. A. I do not understand that is so.

Q. Well, is it not a fact that all Safe Harbor energy—and by that term I understand you to mean energy [11957] generated at Safe Harbor—is delivered physically to Pennsylvania Water and Power Company? A. Oh, I get you, yes—delivered to their transmission line.

Q. Now, what did you mean there when you said some of that Safe Harbor energy is diverted to Holtwood Company? A. I meant that is delivered to either the Holtwood bus or to Holtwood's Pennsylvania customers.

Q. And by that phrase "Pennsylvania customers," I take it you are referring to Pennsylvania Power and Light Company, Philadelphia Electric Company at Coatesville, Metropolitan Edison Company at York, and The Pennsylvania Railroad Company? A. That is right.

* * *

Q. So that as I understand your testimony now, you are saying there at 11464 that something more than the mathematical amount of one-third of the energy generated at Safe Harbor is in fact delivered to Holtwood's bus, or to the various Pennsylvania customers that I just enumerated; is that right? A. That is right.

[11958] Q. Well, did you ever make any determination as to the exact amount of that diversion, as you put it, in 1944? A. Yes, I studied that. I found that the amount in excess of one-third of the Safe Harbor output that was delivered

into the Holtwood system outside of the 220 kv. lines was the same amount that Baltimore received in excess of its entitlement from Holtwood in excess of the firm power demand.

Q. Now, what is this amount you referred to as the amount Baltimore received in excess of its entitlement from Holtwood in excess of the firm power demand? A. Well, I was explaining the entitlement from Holtwood, its entitlement from Holtwood which is one-third of Safe Harbor plus Holtwood generation, minus the firm power requirements in Pennsylvania.

Q. Well, that amount that you have just referred to in your last answer depends upon the assumption that all that Holtwood receives from Safe Harbor is the mathematical figure of one-third of Safe Harbor's output. Isn't that right? A. Yes, if it receives more than that one-third then [11959] that same amount in excess is delivered to Baltimore over what its entitlement would be if it received only one-third.

Q. I did not ask you anything of that kind, Mr. Davis. I asked you what was the amount, or if you had ever determined the amount in excess of one-third of the Safe Harbor output delivered to the Holtwood System, other than to the 220 kv lines. Now, can you give me that figure? A. I do not have the figure with me, but I determined that that was the same figure that Baltimore received in excess of its entitlement from Holtwood.

Q. Well, whatever it is the same as, is the amount substantial? A. Yes, quite a large amount.

Q. And you say all of that substantial amount in excess of one-third of Safe Harbor's output delivered to Holtwood's system other than the 220 kv lines is this diversion that you are talking about at 11464; is that right? A. That is what I meant there by "diversion", yes.

Q. Now, is there anything in any of the contracts identified in this record, particularly H and I, which speci-

fies such diversion? A. No, the contract provides that Holtwood will transmit Baltimore's two-thirds of Safe Harbor output to Baltimore.

Q. Well, now, just a moment. Where does it provide [11960] that? Are you referring now to page 10 of Exhibit H and Exhibit I that we referred to this morning? A. I do not know what page it is on.

Q. In E, F and G, I mean.

MR. GOLDBERG: Let the witness finish his answer.

By MR. MYSE:

Q. What other provisions did you have reference to? A. There is no other provision in the contract except the provision for coordination in H and I.

Q. We have gone into that in great detail, have we not? A. Yes, but it is still pertinent.

Q. Now, what is the provision that you referred to in H and I, is what my question related to, relating to the requirement of transmitting Baltimore's two-thirds, as you say? I would rather think it is in E, F and G, but if you know of one in H and I, I would like to have you point it out. A. It probably is in E, F and G. If you happen to know where it is, we can save time.

Q. I know of no place in H and I, but I can refer you to E, F, and G, if you think that is where it is. A. I would recognize it if I saw it. Yes, that is provided in E, F and G.

Q. Then I take it what you had reference to was [11961] Article VII of Items E, F and G that we had reference to this morning? A. That is right.

Q. Is there anything in that Article VII which says Holtwood shall transmit two-thirds of Safe Harbor's output to Baltimore? A. No, it says Holtwood shall transmit energy to Baltimore.

Q. Whatever it may be? A. That is right.

[11962] Q. Well, my question to you was—~~And~~ let us make it a new question if you did not so understand it—Are the 60 cycle generating resources from Pennsylvania Water and Power Company, plus whatever it actually receives from Safe Harbor that is generated at Safe Harbor, adequate to take care of all the firm power services in Pennsylvania?

[11963] THE WITNESS: As I understand the question now, it is: Are the generating resources of Holtwood plus the total generating resources of Safe Harbor adequate?

By MR. MYSE:

Q. No, plus the amount of energy received by Holtwood from Safe Harbor which is generated at Safe Harbor adequate to take care of the firm power services of Pennsylvania?

THE WITNESS: There are times when it is not adequate.

[11964] Q. Now, Mr. Davis, referring again to page 11464 in the same line relating to what you call "diversion" of Safe Harbor energy, is it not a fact that most of what you would call diversion of Safe Harbor energy from Baltimore is for the purpose of supplying interchange customers? A. It might be.

Q. Well, isn't that the fact? A. No, I would not say most of it. 60 cycle energy is all commingled. You cannot assign any particular part of it to interchange and the other part to firm power, that I know of.

Q. A good share of it, however, is used for interchange, is it not? A. If you segregate the interchange and compare it with what comes from Safe Harbor, you might say that; but I do not see that there is any reason for doing that.

[11965] Q. Where else does the interchange come from that is supplied by either the Holtwood or the Safe Harbor

system to the Pennsylvania customers? A. Well, it comes up from Baltimore. It comes from Safe Harbor.

Q. Are you saying that backfeed is also used for interchange purposes? A. To a very small extent.

Q. Then the balance of the interchange must have been generated either at Safe Harbor or Holtwood? A. Yes, sir.

Q. Or it might have been interchange that was generated at one Pennsylvania customer and sold to another Pennsylvania customer? A. That could be.

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Q. Now, assuming that some of this Safe Harbor energy is, in fact, diverted—as you put it—for use in connection with firm power supply in Pennsylvania, how does Baltimore get its compensation for that diversion? A. It gets it through H and I.

[11966] Q. By a reduction in the bill from Holtwood to Baltimore, is that what you mean? A. A credit of the revenue obtained from that energy.

Q. And that has the effect of reducing Baltimore's bill from Holtwood; is not that right? A. That is right.

Q. Now, other than the provision of Article III of H and I which covers the payments made by Baltimore to Holtwood, is there any provision in any of the contracts on record in this proceeding which covers this compensation to Baltimore for this so-called diversion that you spoke of at page 11464? A. I do not recall any.

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[11969] Q. Now, in your Exhibit 64, you credited to Baltimore the net interchange revenues, did you not? A. Yes.

Q. You did not, however, charge against Baltimore the costs incurred in rendering interchange services, did you? A. No, I charged that off against the railroad, either Pennsylvania or Maryland.

Q. But you did not charge it to Baltimore, did you? A. No, except through the railroad.

Q. To the extent that some of that interchange cost was chargeable to the railroad in Maryland, you did charge it to Baltimore, but that is the only extent you charged it to? A. The rest was charged to the railroad in Pennsylvania.

Q. Now, what did you do with respect to the costs incurred in operating and having available the two north circuits on the Perryville line? Where did you charge those costs? A. The total line was charged—was divided between Baltimore and the railroad in Pennsylvania.

Q. But the fact is that almost 95 per cent of that line is used either for the railroad in Maryland or for interchange purposes. Is not that right? A. Yes, that interchange is rather tied up with railroad service. It is difficult to say whether that is [11970] for the benefit of anything else except the railroad.

Q. Well, it is not very difficult for you to say, however, that it is for the benefit of Baltimore, is it? A. That it goes through Perryville south, that is for the benefit of Baltimore.

Q. And also that that goes through Perryville north is for the benefit of Baltimore, isn't that right, as interchange? A. The net interchange, yes.

Q. And yet you have not charged the costs incurred in using that line for interchange purposes to Baltimore other than the small amount which might be associated with railroad service in Maryland, have you? A. Did you say small amount?

Q. Well, whatever the amount is. A. The other day you said it was practically all of it.

Q. Well, you have not charged those costs against Baltimore, have you? A. No.

* * *

[11977] Q. Take a look at page 11782, please, starting at line 13. You were there testifying, as I understand your testimony—tell me if I am wrong—in connection with why you didn't use the actual demands of the railroad at the

time of the Area 6 system peak in connection with your Table V-A. Isn't that right? A. That is right.

Q. Now, the purpose of making the deductions of the demands of the various Pennsylvania customers and the railroad in V-A of Exhibit 64 was merely to determine what was left under your method of the dependable capacity available to Baltimore? A. That is right.

Q. And you weren't in that Table V-A concerned with [11978] the cost of service to the railroad, were you? A. No. We were concerned with a reasonable figure for the demand required by the railroad.

Q. Then as I understand your testimony you were not considering a reasonable figure for the demand of the railroad at the time of Area 6 system peak? A. Yes, that is what I meant.

Q. But the fact is you didn't use the actual demand, did you? A. No, not at that particular hour.

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[11980] Q. Now, will you refer to the bottom of page 11783, the question beginning at line 20 and the answer through the ending at line 3 of 11784?

Does that answer to that question mean you do not need excess capacity to supply Pennsylvania customers except for the maintenance you referred to in that answer? A. Well, I meant that the excess capacity during high flow periods there is used to shut down steam equipment for scheduled maintenance.

Q. Well, you are not saying you don't need the capacity other than for scheduled maintenance? A. You need it for scheduled maintenance. You need it to replace the capacity that is taken out of service for scheduled maintenance.

[11981] Q. Well, whose scheduled maintenance are you there referring to? A. That would be steam maintenance mostly.

Q. Of the Pennsylvania customers? A. No, that is mostly Baltimore's maintenance that would use that excess capacity during high flow periods.

[11984] Q. Now, a little bit further along on that same page 11792, beginning at line 12, you testified, as I understand it, that Baltimore Company owns two-thirds of Safe Harbor development. Is that right? [11985] A. That is the way I understand it.

Q. Well, actually they don't own anything of the kind. They own two-thirds of the stock. Isn't that right? A. That is what I interpret to mean owning two-thirds of the property.

Q. So you interpret the ownership of two-thirds of the common stock by Baltimore Company as equivalent to the ownership of two-thirds of Safe Harbor development. Is that right? A. I have considered all through this study that Baltimore owned two-thirds of the Safe Harbor development.

Q. And as a result of that, you assigned what you call the two-thirds share of the energy available from Safe Harbor to Baltimore. Is that right? A. Well, I took that two-thirds share as the contract share of Safe Harbor energy to which Baltimore is entitled.

Q. Now, if the event happened that we mentioned this morning under Article VII of Items E, F and G—that is, that for some reason Penn Water failed to transmit the energy sold by Safe Harbor to Baltimore, and thereby was required to purchase all of it, Baltimore would no longer be entitled to two-thirds of the energy under E, F and G, would it?

[11986] THE WITNESS: Under those conditions, it would not.

By Mr. MYSE:

Q. And even though it owned two-thirds of the common stock or owned two-thirds of Safe Harbor, as you construe that ownership, it would still not be entitled to two-thirds of the energy under those conditions. Isn't that right? A. That is right.

Q. So that the ownership of stock or of the property is no criterion of what Baltimore is entitled to? A. Not under catastrophic conditions.

[12211]

JOHN M. NEWLANDS

CROSS EXAMINATION (continued)

By Mr. HULL:

[12242] Q. Is Exhibit 61 not a study of depreciation? A. Exhibit 61 is a calculation of a reserve requirement for which Mr. Dunn is responsible and in which I assisted him.

Q. Is the reserve requirement the accrued depreciation in the property? A. Yes, it is the best measure of accrued depreciation in the property.

Q. Do you say that without any regard to what causes of depreciation are? A. No. It is my understanding that the calculation of the reserve requirement takes into consideration the causes of depreciation. They are mostly reflected in the service lives set on the property by the engineers.

Q. Did you take the several causes of depreciation into account when you reviewed and approved the computation of the reserve requirement contained in Exhibit 61? A. No, I didn't have to. We used service lives as estimated by the engineers. I didn't even make the calculation [12243] which resulted in the annual and accrued depreciation.

Q. So that what you did you did wholly regardless of what the causes of depreciation are? A. No; that is not so. What I did was to assist Mr. Dunn in preparing a depreciation reserve requirement.

Q. And you told me that that is the accrued depreciation. A. It is the best measure of accrued depreciation in the plant, yes.

Q. And you say that without any consideration whatever as to what the causes of depreciation are? A. No, that is not so.

Q. Well, I thought you must have considered the causes of depreciation, and that is the reason I asked you the question. A. It was not necessary for me to consider the causes of depreciation in the work which I did to assist Mr. Dunn in preparing this report. Those causes of depreciation were considered by the engineers in setting their estimated service lives. Those estimated services lives were given to Mr. Dunn and he used them in calculating the annual reserve requirement. I didn't have to determine what the causes of depreciation were in the work which I did to assist Mr. Dunn in preparing Exhibit 61.

[12293] Q. Did you at any time in the course of your investigation in connection with this case make any inquiry into what [12294] was a fair return on the investment in each year of the company's operating history? A. No, I have not.

Q. Did you make any determination of the extent, if any, by which the "aggregate credit balances of current depreciation accounts" had been accumulated by the respondents from earnings in excess of a fair return on the company's actual legitimate original cost? A. No, I have made no such investigation.

Q. Do you know whether such a determination was made by anyone else? A. I do not know.

[12296] Q. Do you not consider your computation in Exhibit 57, and the recommendations contained in Exhibit 61 to be a recommendation to the Commission that straight-line depreciation, and a depreciated rate base be used in this case in arriving at a determination of what are fair and reasonable rates? A. Not necessarily. The Exhibit 57 was prepared to illustrate the terms of the Federal Power Act, which refers to net investment.

Q. And do I understand that you were endeavoring by Exhibit 57 to arrive at a net investment rate base, as that term "net investment" is used in the Federal Power Act?

A. Yes.

Q. Can you direct me to the portion of the Act to which you refer? A. Page 4 of the Federal Power Act gives a definition of net investment.

Q. Well, now, that refers, among other things, to the deduction of aggregate appropriations of surplus or income held in amortization sinking fund or similar reserves, and also to aggregate credit balances of current depreciation accounts.

[12297] Now, what do you understand to be meant by aggregate credit balances of current depreciation accounts? A. To be balance in the reserve for depreciation.

Q. And that is what you understand this definition requires you to deduct? A. Yes, I would say so.

Q. Do you understand this definition to require you to deduct that in each and every case?

MR. GOLDBERG: Each and every company?

MR. HULL: Yes.

MR. GOLDBERG: I object to that.

By MR. HULL:

Q. Do you understand it to be a general rule applicable under all circumstances?

MR. GOLDBERG: I object to that, Mr. Examiner, because it is entirely irrelevant and immaterial,